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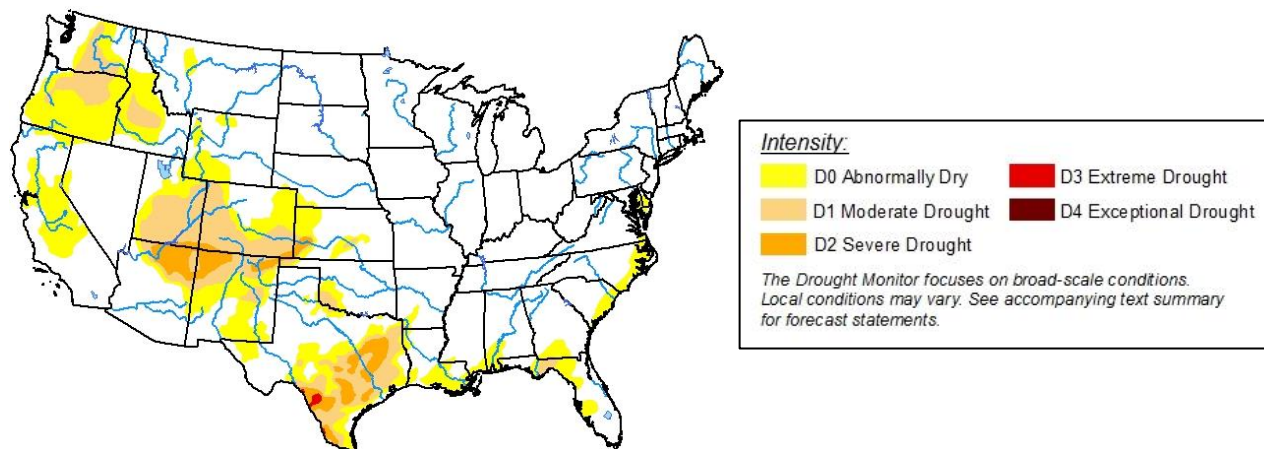
WATER SUMMARY UPDATE

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A snapshot of water resource trends for the month of January 2020

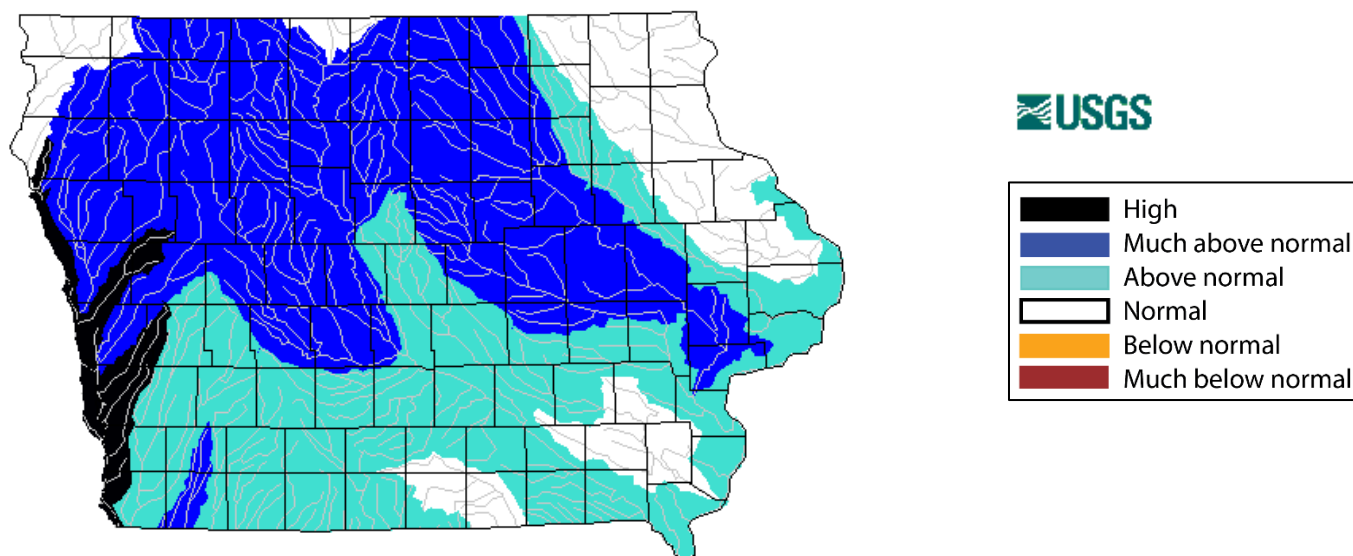
Drought Monitor - Conditions as of February 4, 2020

National Drought Mitigation Center and partners



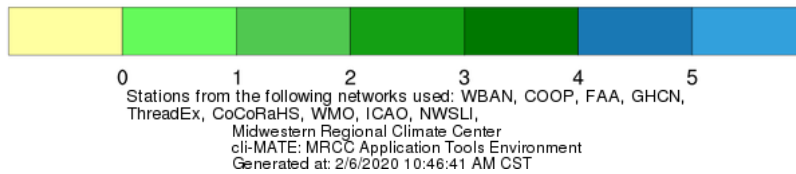
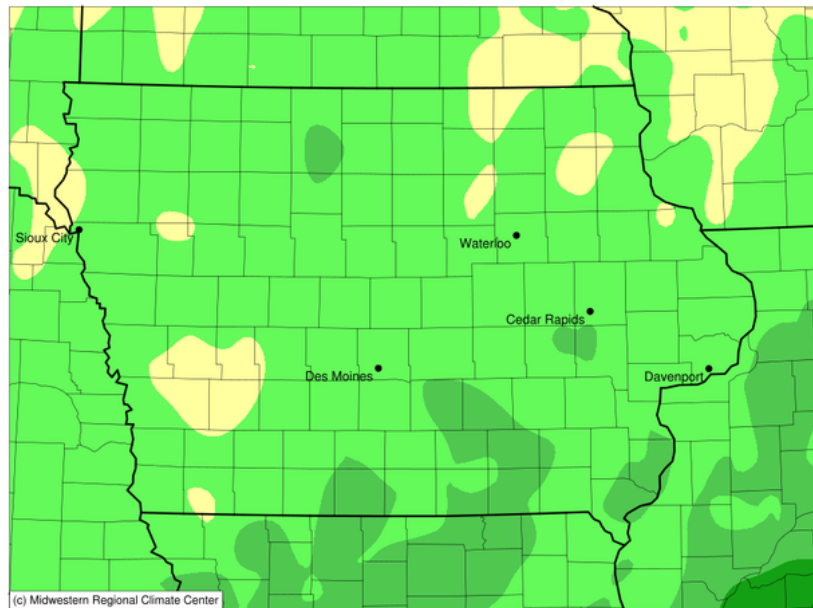
Stream Flow – January 2020

January 2020



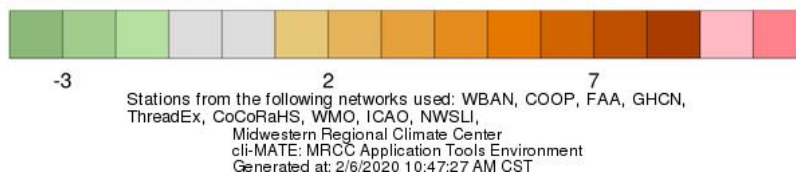
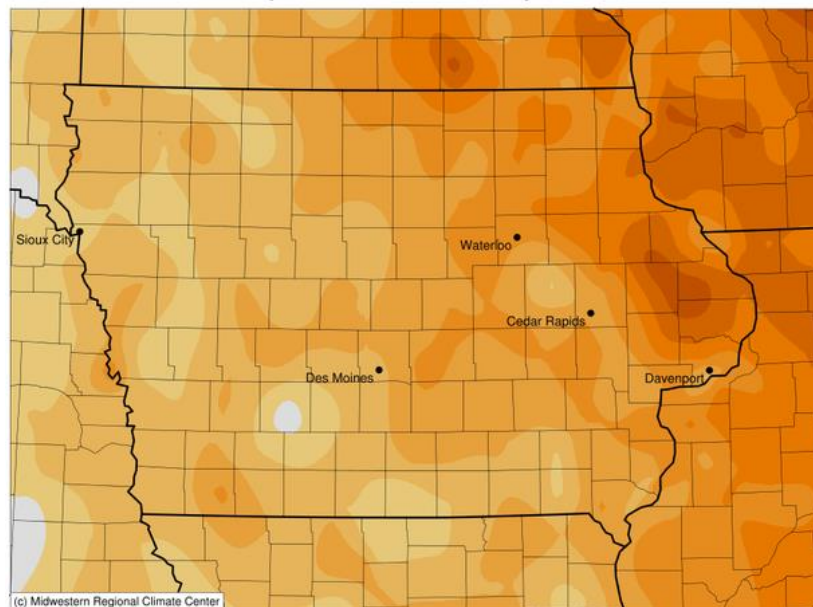
Accumulated Precipitation (in): Departure from 1981-2010 Normals

January 01, 2020 to January 31, 2020



Average Temperature (°F): Departure from 1981-2010 Normals

January 01, 2020 to January 31, 2020



RECENT DEVELOPMENTS AND CHANGES

SUMMARY

January 2020 was warm and wet. The trend of wetter than normal months continued, with precipitation of 1.27", compared to the normal precipitation level of 0.92" for January. The past 24 months, starting in February 2018, rank as the wettest two year period in Iowa. For the Upper Mississippi River basin (including parts of Iowa, Minnesota, Wisconsin, Illinois, and Missouri) the last one, two, three, four, and five year periods have each been the wettest on record. Statewide temperatures in January were warmer than normal, averaging 23.0 degrees or 3.6 degrees above normal. Stream levels have improved somewhat, while groundwater conditions are good. There remains an elevated potential for spring flooding this year.

DROUGHT MONITOR

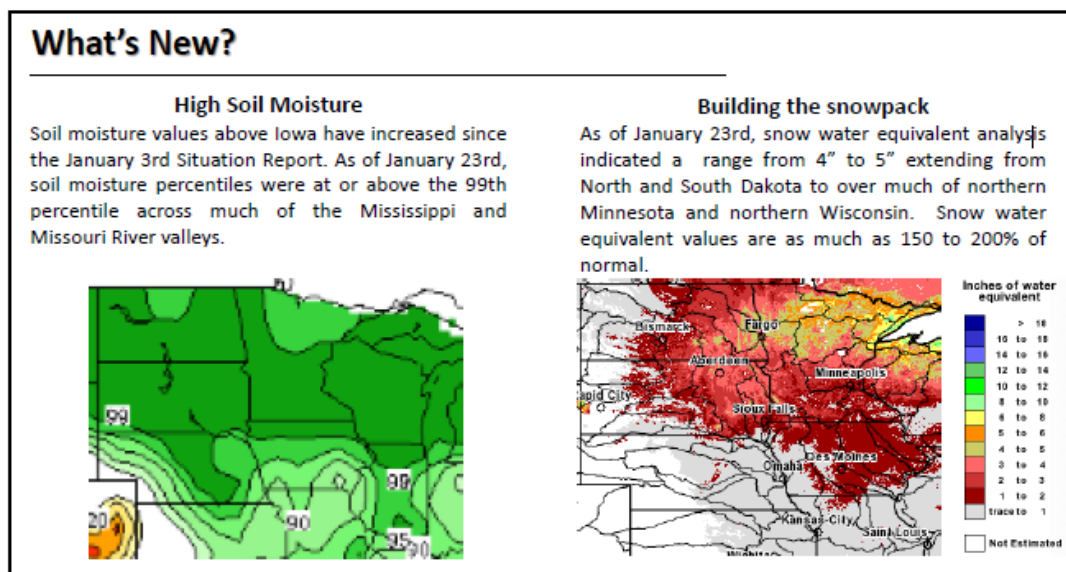
Iowa remains drought and dryness free. In fact, nearly the entire Mississippi River and Missouri River basins are free from drought and dryness. Nationally, there are areas of mostly moderate drought shown in Texas, the four corners area of New Mexico and Arizona, and the Pacific Northwest.

CURRENT STREAM FLOW

Streamflow conditions in the state have decreased slightly from last month, and are now rated as above normal in most places. There are a few areas that remain in the high condition along both the Missouri and Mississippi Rivers. It is important to note that these flows are compared to normal for this time of the year, and that during the winter, flows are normally much lower than in the spring months. Also, during the winter season, USGS streamflow data may be impacted by ice formation and backwater, so streamflow information should be used as preliminary only.

SPRING 2020 FLOOD THREAT

On January 24, 2020 the National Weather Service (NWS) issued a Situation Report (see below for a figure from that report) indicating an increased spring flood threat for much of Iowa, including the Mississippi and Missouri Rivers. However, significant flooding is still not yet certain, and the NWS will continue to evaluate additional contributing factors over the coming months. The first Spring Flood Outlook will be issued February 13, 2020 by the National Weather Service.



JANUARY PRECIPITATION AND TEMPERATURE

Statewide average precipitation totaled 1.27” or 0.35” above normal. This was the 39th wettest January on record with a wetter one occurring in 2017. A majority of reporting stations across Iowa observed above average precipitation in January with the largest positive departures of one to two inches across southern portions of the state. Measurable precipitation fell on 22 days with totals ranging from 0.45 inch in Rock Valley (Sioux County) to 3.11 inches in Burlington (Des Moines County). Above average snowfall also blanketed much of the state, with the preliminary average snowfall of 11.2 inches, 3.5 inches above average. This ties 1905 and 1918 as the 20th snowiest January, based on 133 years of records; Kanawha (Hancock County) reporting the highest total of 24.9 inches.

Statewide temperatures in January were unseasonably warm, on average 23.0 degrees or 3.6 degrees above normal. This ranks January 2020 as the 38th warmest in 148 years of observational records; a warmer January last occurred in 2017. Eastern Iowa experienced the warmest conditions where positive departures of up to six degrees were reported in the monthly averages. January’s statewide average daytime high temperature was 30.1 degrees, 1.9 degrees above normal, while the minimum temperature was 15.2 degrees, 5.0 degrees above normal. The month’s high temperature of 63 degrees was reported on the 9th in Bloomfield (Davis County) and Centerville (Appanoose). This reading was on average 31 degrees warmer than normal. Logan (Harrison County) recorded the lowest morning temperature of the month with a -16 degrees reading on the 21st, 26 degrees below average.

SHALLOW GROUNDWATER

Shallow groundwater conditions remain stable as Iowa moves through the winter, with plentiful supplies of shallow groundwater existing across the state.

MISSOURI RIVER BASIN

All of the 2019 floodwaters were evacuated from the reservoir system in January, with storage capacity reaching 56.0 MAF on January 22. Mountain snowpack continues to accumulate at near average rates, while plains snowpack is present in central and eastern North and South Dakota. The amount of water in that snowpack is equal to as much as 5 inches of rain in some places. The Corps of Engineers is forecasting that runoff from the Missouri River Basin above Sioux City will be 141% of average. Gavins Point reservoir is currently releasing 35,000 cfs, which is about double the normal winter release rate.

ADDITIONAL INFORMATION

For additional information on the information in this Water Summary Update please contact any of the following:

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